

CHERNYSH, V.I. Engineer-Major

At all-union conference on Hydro-optics, Read paper on "The Deep-water Hydrostat as an Observatory for Hydro-optical Studies" (Jan. 20, 1947) Held at USSR Academy of Sciences, Leningrad

Soviet Source: N: Leningradskaya Pravda, No. 17, 21 Jan. 47, Leningrad
Abstracted in USAF, "Treasure Island", on file in Library of Congress, Air Information Division, Report No. 92018

2146

S/120/61/000/002/017/042
E192/E382

6.4770

AUTHOR: Chernysh, V.I.

TITLE: Photo-electronic Method of Detecting Weak Pulse
Signals

PERIODICAL: Pribory i tekhnika eksperimenta, 1961, No. 2,
pp. 97 - 101

TEXT: It is known (Ref. 1) that by employing the storage method it is possible to detect weak radio-echo signals from the background of the receiver noise. The author proposed a storage device where a photomultiplier was employed as a selective element. This resulted in comparatively simple equipment. The idea of using a photo-electric sampling device in the storage circuit was first proposed by Kostarev in 1957. The principle of a storage device with photo-electric sampling is based on the comparison of the average values of two equally long samples of the output voltage of a radar receiver. These voltage samples are taken from the time base of the display tube through a narrow slot of a tube which directs the light beam onto the cathode of a photo-

Card 1/7

21406
S/120/61/000/002/017/042
E192/E382

Photo-electronic Method

multiplier. The system is illustrated in Fig. 1. The time base of the display tube is triggered at a frequency $2f$ which is twice the pulsing frequency f of the radar station. Due to this, the first sample, together with the noise, can also contain a radio-echo signal, while the second sample contains only noise. In the presence of a reflected signal, there will be an additional DC component which does not exist in the second sample. The storage circuit is based on the modulation method (Refs. 1, 2) of comparing the effective values of the samples during the pulse operation of the radar station. In this way, it is possible to reduce the unstabilising effect of the supply variations, tube-characteristic changes, changes in the parasitic parameters of the tubes and so on. The system (see Fig. 1) consists of two main units: 1 - control channel and 2 - signal channel. The main element in the control channel is the standard oscillator operating at $2f$, which performs the synchronisation of the transmitter and the time-base generator of the display tube and provides a reference voltage for the synchronous detector of the storage device.

Card 2/7

21406

S/120/61/000/002/017/042

E192/E382

Photo-electronic Method

The standard frequency is divided by two and two negative pulses, repeated at the frequency f , are used for triggering the modulator of the transmitter. The pulses of the generator repeated at the frequency $2f$ are used to trigger a delay phantastron (3 - 80 μ s), which controls the instant of the release of the time base. By changing the length of the delay, the triggering of the time base can be suitably delayed with respect to the triggering pulse of the transmitter so that the signals appearing at the slot of the photomultiplier are suitably positioned. In order to achieve synchronism of the detected signal and the reference voltage at the phase-detector, the reference-voltage stage is triggered simultaneously with the time base by the trailing edge of the phantastron output pulse. The afterglow time of the display tube should be less than the half period of the operating frequency of the time base. The main element in the storage system is the photo-electron multiplier, type 09Y-18 (FEU-18). This is placed in a lightproof cover provided with a slotted tube through which the light beam from the time base of the cathode-

Card 3/7

21406

S/120/61/000/002/017/042

E192/E382

Photo-electronic Method

ray tube falls onto the cathode of the multiplier. The width of the slot for a given length of the time base determines the duration of the sample of the photo-electronic key and, consequently, the resolving power of the storage system as regards distance. In the system described, the width of the slot was 0.5 mm, which corresponded to the length of the sample of 0.7 μ s for the time-base scale of 8 km; consequently, the resolving power of the storage system was 100 m. From the output of the photomultiplier the samples are applied to a narrow-band RC amplifier, where the signal voltage is filtered and applied to the synchronous detector. The amplifier is tuned to the signal frequency f and has a bandwidth of 50 c.p.s. If the sample obtained from the photomultiplier contains a signal, the output voltage of the narrow-band amplifier will contain a harmonic component having the frequency of the radar-transmitter pulses. The synchronous filter in the storage system is based on a phase-detector which also acts as an amplifier. The gain obtained by the photo-electron storage device in the reception of weak signals

Card 4/7

Photo-electronic Method

Z1400
S/120/61/000/002/017/042
E192/E382

was determined experimentally by means of suitable equipment. The results of the experiments are shown in Fig. 4, from which it is seen that the photo-electric storage system permits reliable detection of signals whose amplitude is 16 db lower than the noise level. Consequently, such a storage system can permit the detection of the meteors which give very weak reflection signals. The above system can also find application where it is necessary to detect and determine the coordinates and shape of periodic signals, whose amplitude is much lower than the equipment noise. The author expresses his gratitude to A.G. Gorelik for a device and help in this work. There are 4 figures and 4 Soviet references.

ASSOCIATION: Tsentral'naya aerologicheskaya observatoriya
(Central Aerological Observatory)

SUBMITTED: March 2, 1960

Card 5/7

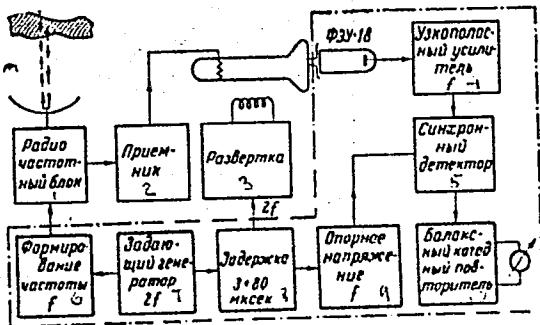
21406

S/120/61/000/002/017/042

E192/E582

Photo-electronic Method

Fig. 1: Key - 1 - radio frequency; 2 - receiver;
 3 - time base; 4 - narrow-band amplifier;
 5 - synchronous detector; 6 - frequency stage;
 7 - standard oscillator;
 8 - delay circuit; 9 - reference-voltage stage and
 10 - symmetrical cathode-follower.



Card 6/7

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4

Photo-electronic Method

Z1100
S/120/61/000/002/017/042
E192/E382

Fig. 4:

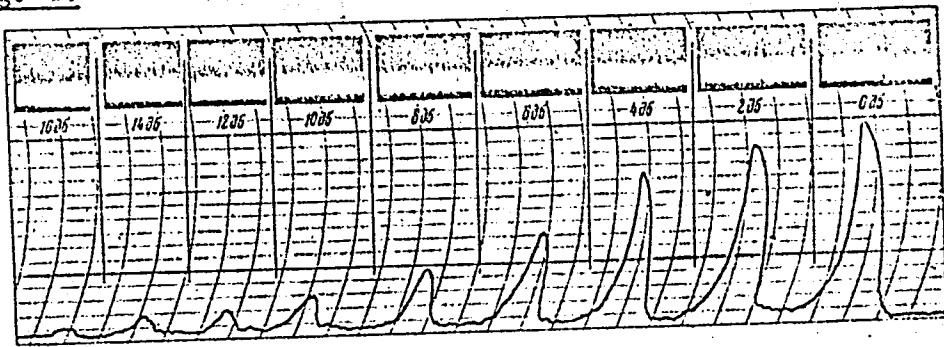


Fig. 4

Card 7/7

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4"

64770

42532

S/789/61/000/036/013/013
E192/E382

AUTHOR: Chernysh, V.I.

TITLE: Storage device with photo-electronic signal selection

SOURCE: Tsentral'naya aerologicheskaya observatoriya. Trudy.
no. 36. Moscow, 1961. Voprosy fiziki radiolokatsii
oblakov, 135 - 141 .

TEXT: The system permits detection of weak radio-echo signals mixed with noise, the signals being received by radar stations employed for meteorological purposes. The high gain in the signal-to-noise ratio (as compared with that of normal radar equipment) is achieved by using a comparatively simple storage system based on photo-electronic selection or gating. This type of gating was first proposed by V.V. Kostarev in 1957. The principle of the photo-electronic gating system is based on comparing the average values of two samples of the output voltage of the radar receiver, the samples being of equal duration. These samples are taken from the time base of the display tube (which is brightness-modulated) through a narrow slot which directs the light flux onto the cathode of a photomultiplier. (Fig. 1). The time base is triggered at a

Card 1/4

S/789/61/000/036/013/013

E192/E382

Storage device with

frequency twice as high as the pulse-repetition frequency of the radar station. Due to this, the first sample, together with noise, can also contain the echo signal, while the second sample contains only noise. In the presence of a reflected signal the first sample contains an additional DC component which is absent from the second sample. The storage system consists of two parts: a control unit and a signal unit. The main element of the control unit is a driver generator operating at a frequency $2f$, which performs the synchronisation of the transmitter and the time-base of the display tube, and of the reference voltage of the synchronous detector of the system. The negative pulses from the driver generator trigger the modulator of the transmitter after binary division. On the other hand, the pulses of frequency $2f$ trigger a delay phantastron which determines the instant of triggering the time base. The received signals are shifted under the slot of the photomultiplier by changing the length of the delay with respect to the trigger pulse of the transmitter. The circuit for generating the reference voltage is triggered at the same instant as the time-base of the tube to synchronize the signal and the reference voltage of the

Card 2/4

S/789/61/000/036/013/013
E192/E382

Storage device with

phase-detector. The gating element in the system is provided by a photo-electron multiplier, type 95Y-18 (FEU-18). The average samples from the output of the photomultiplier are applied to a narrow-band RC amplifier, which is tuned to the signal frequency f and has a bandwidth $\Delta f = 50$ c.p.s. The amplifier also acts as a preliminary filter. The gain in the signal-to-noise ratio of the system was measured experimentally and it was found that it was possible to achieve reliable registration of signals whose amplitude was 16 db lower than the noise. The author expresses his gratitude to A.G. Gorelik for help and advice.

There are 4 figures.

Key to Fig.1: 1 - Narrow-band amplifier; 2 - R.f. unit;
3 - receiver; 4 - time base; 5 - sync. detector;
6 - forming frequency f ; 7 - driver $2f$; 8 - delay 3 - 80 μ sec;
9 - reference voltage f ; 10 - balanced cathode follower.

Card 3/4

PINUS, N.Z., doktor fiz.-matem. nauk, prof.; SHUR, G.N., kand. fiz.-matem. nauk; VINYICHENKO, N.K.; CHERNYSH, V.I.

Basic principles of the automatization of processing airplane meteorological information. Meteor. i gidrol. no.9:3-9 '64.

1. TSentral'naya aerologicheskaya observatoriya.

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4

Additional research of
the information contained in
the attached document is
recommended.

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4"

A.1.

Finite sets, infinite sets

- Ch. I. Theory of sets. Functions
1. Finite sets
2. Infinite sets
3. Cardinal numbers
4. Functions
5. Methods of setting up

A4

1. Information Systems -

Ch. II. Probabilities --
1. Random phenomena, etc.

2. Probability distributions

- 1. Random quantity --
- 2. Distribution function.
- 3. Probability density
- 4. Cumulative distribution
- 5. Probability distribution

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4

5. Coding. Modulation

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4"

L 6091-65
AM5014986

- 2. Quantity of information -- 110
- 3. Feasibility -- 110
- 4. Transmission capacity -- 110
- 5. Statistical codes -- 110
- 6. Action of noise -- 110
- 7. Transmission capacity -- 110
- 8. Noise-immunity -- 110
- 9. Bit-error rate -- 110

Ch. VII, Algorithms -- 174

- 1. Algorithms -- 274
- 2. The "Binary Machine"

Appendix: Tables -- 382

Index -- 492

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4"

L 3540-65 EWT(d)/EWT(1)/EFC(1)-2/FCC/EWP(1) IJP(c) BB/GG/GW

ACCESSION NR: AT5022882

UR/2789/65/000/063/0077/0084

551.508

40

37

B41

AUTHORS: Vinnichenko, N. K., Pinus, N. Z. (Doctor of physico-mathematical
sciences); Chernysh, V. I.; Shur, G. N.

TITLE: Principles of automatic treatment of aeroplane meteoinformation

SOURCE: Tsentral'naya aerologicheskaya observatoriya. Trudy, no. 63, 1965.
Voprosy dinamiki atmosfery (Problems of atmospheric dynamics), 77-84

TOPIC TAGS: airborne data processor, airborne equipment, meteorological
phenomenon, meteorology, infrasonic spectrometry

ABSTRACT: To expedite the analysis of meteorological information gathered by an
aeroplane, the authors developed an integrated method for treating such data,
employing digital and analog computers, an electronic analyzer of stationary
random processes, and an infrasonic spectrometer. Block-diagrams for the treat-
ment of slowly varying meteoparameters and pulsating parameters are presented.
(see Fig. 1 on the Enclosure). It is concluded that with the aid of the digital
computer it should be possible to make certain selections and to perform the

Card 1/3

L 3540-66

ACCESSION NR: AT5022882

interpolation and extrapolation of the gathered experimental data. Orig. art.
has: 2 graphs.

ASSOCIATION: Tsentral'naya aerologicheskaya observatoriya (Central Aerological Observatory)

SUBMITTED: 00

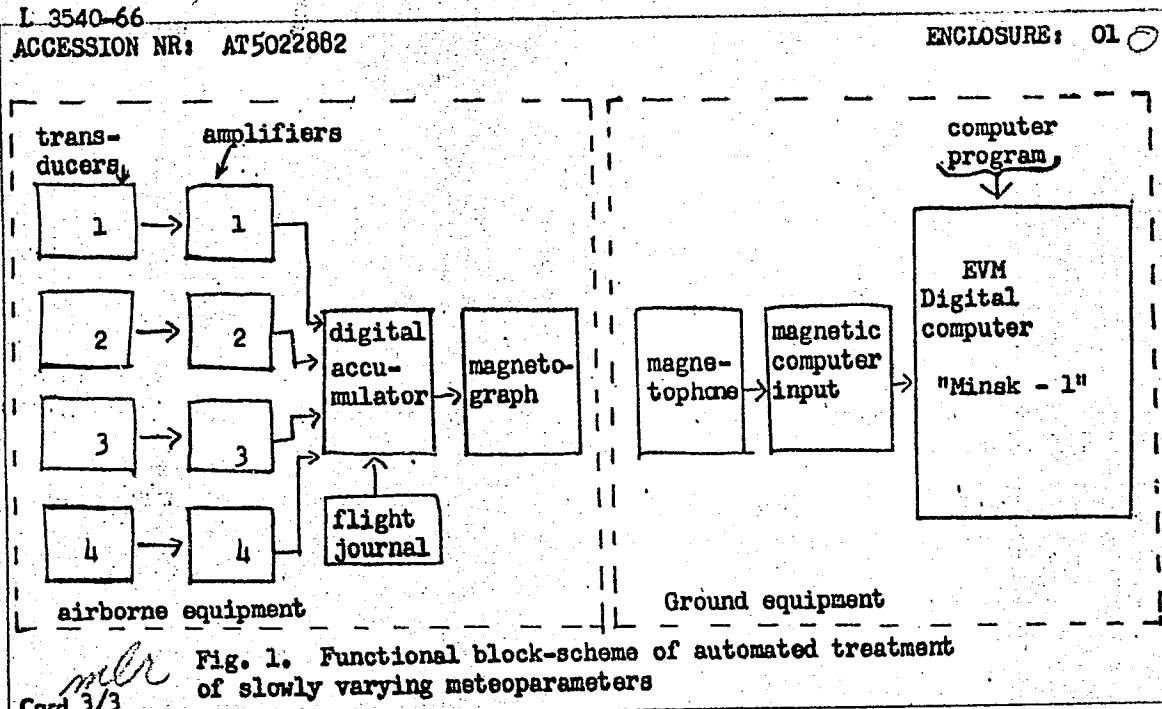
ENCL: 01

SUB CODE: ES

NO REF SOV: 008

OTHER: 000

Card 2/3



L 5056-66 EWT(1)/EVT(1)/FCC/EWF(1) IVP(c) RR/OG/GW

ACC NR: AT5022883

SOURCE CODE: UR/2789/65/000/063/0085/0095

AUTHOR: Chernysh, V. I.

ORG: Central Aerological Observatory (Tsentral'naya aerologicheskaya observatoriya)

TITLE: An airborne digital storage element for meteorological data

SOURCE: Tsentral'naya aerologicheskaya observatoriya. Trudy, no. 63, 1965. Voprosy dinamiki atmosfery (Problems of atmospheric dynamics), 85-95

TOPIC TAGS: aerospace communication, airborne receiving equipment, storage unit, computer component/ Minsk 1 computer

ABSTRACT: A five-channel transistorized airborne device has been designed to provide magnetic recording of slowly changing meteorological parameters (air pressure, humidity, air temperature) and the air speed of an airplane. It is suitable for processing on the Minsk-1 computer. This computer is a part of an automatic complex now being developed at the Laboratoriya dinamiki atmosfery TsAO (Laboratory of Atmospheric Dynamics of the TsAO). The output of the memory unit is a single-track record of numbers in a binary-octal code on ordinary magnetic tape 6.5 mm wide. The system involves an

Card 1/2

UDC: 551.508

L 5056-66

ACC NR: AT5022883

input voltage of 0—6 v, 4 input channels, and a channel switching frequency of 2 cps. The operating conditions permit a temperature range from -45 to +50C and humidity up to 95%. The device uses 92 transistors. Power supply is 220 v, 50 cps, or 115 v, 400 cps; power consumption is 12 w. Laboratory tests show that appreciable error is introduced because of the nonlinearity of the charging circuit of the coupling capacitor of the multivibrator which serves as a time-interval oscillator in the analog-code converter circuit. It is because of this nonlinearity that the error varies in different parts of the range; mean error of the storage element is 3.2%. To lower the error to 0.5—1%, it is suggested that a time-interval oscillator with highly linear elements be used, such as sawtooth phantastron and a discriminator-type comparison circuit. Orig. art. has: 3 figures, 1 table, and 3 formulas. [04]

SUB CODE: ES,DP/ SUBM DATE: none/ ORIG REF: 012/ OTH REF: 001/

ATD PRESS: 4/32

Card 2/2 Mid

CHERNYSH, V.M.

Recent developments in the maintenance of motortrucks. Mekh. sil'.
hosp. 14 no.10:17-18 0 '63. (MIRA 17:2)

1. Glavnyy inzh. transportnogo otdeleniya Ukrainskogo respublikanskogo ob"yedineniya "Ukrsil'gosptekhnika".

SERDYUK, G.B., kand.tekhn.nauk; CHERNYSH, V.P., inzh.

Kinetics of metal transfer in an argon welding arc. Svar. proizv.
no.9:1-3 S '63. (MIRA 16:10)

1. Kiyevskiy politekhnicheskiy institut.

CHERNYSH, V.P., inzh.; PAVLYUK, S.K., inzh.

Using a magnetic field for the control of the building-up
process. Mashinostroenie no.5:85-88 S-0 '63. (MIRA 16:12)

1. Kiyevskiy ordena Lenina politekhnicheskiy institut.

L 52946-65 EWT(m)/EWP(v)/T/EWP(t) SERF/4-85-13 EWAL(c) PI-4 TO FM

ACCESSION NR: AR5008967

S'0137/65 010 001 D-22 T-22
621.791.755

SOURCE: Ref. zh. Metallurgiya, Abs. 1E128

AUTHOR: Chernysh, V. P.

TITLE: Use of external magnetic fields in electric arc welding.

CITED SOURCE: Sb. Vopr. mekhan. i mashinostr. Kiyev, Kiyevsk. un-t, 1964, 146-152

TOPIC TAGS: metallurgy, welding, magnetic field, arc welding

TRANSLATION: An external magnetic field of more than 110 oersteds applied along the axis of the electrode during automatic arc welding causes granulation in the metal seam. The penetration form factor is dependent on the intensity and frequency of the magnetic field. The use of an external longitudinal magnetic field causes a change in the arc parameters which indicates that the arc is displaced by the field. An external longitudinal magnetic field can be used to increase the resistance of welded seams to formation of granulation.

Card 1/2

L 52946-65

ACCESSION NR: AR5008967

ic arc welding with flux and also to increase the speed of single arc-welding.
V. Fomenko.

SUB CODE: MM, EM

ENCL

Cord 2/2

CHERNYSH, Ye.I.

Treatment of coli enteritis. Zdrav. Del. 9 no.6:68-69 Je '63.

(MIRA 17:5)

1. Iz Mozyrskoy gorodskoy infektsionnoy bol'nitsy (glavnnyy vrach
A.A. Rimsha).

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4

CHERNYSH, Ye. K.

"Nekotoryye lokal'nyye osobennosti plemen tripol'skoy kul'tury."

report submitted for 7th Intl Cong, Anthropological & Ethnological Sciences,
Moscow, 3-10 Aug 64.

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4"

CHERNYSH, Ye. S.

25818

25818. CHERNYSH, Ye.S. Peredelka yarovoy pshenitsy Dika v osimuyu. Selektsiya i semenovodstvo, 1949, № 8, s. 70-71

SO: Lethopis' Zhurnal'nykh Statey, Vol, 34, 1949

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4

CHERNYSH, YE. S.

36314 Izmeneniye botanicheskogo sostava pshenitsy dika dzhavakhetskaya
Selektsiya i semenovodstvo, 1949, No. 11, S. 42-44.

SG: Letopis' Zhurnal'nykh Statey, No. 49, 1949

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4"

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4

CHERNYSHCHEV, A. M.

"The Measurement of Viscosity in Slag" lecture given at the International Metallurgists' Conference, Moscow 26-30 June 56

Source CS-3,302,240, 11 Jan 57

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4"

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4

GOL'D, T.; CHERNYSHENKO, A.

Professor Ivan Ivanovich Puzanov. Biul. MOIP. Otd. biol. 66 no.1:
150-152 Ja-F '61. (MIRA 14:3)
(PUZANOV, IVAN IVANOVICH, 1885-)

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4"

CHERNYSHENKO, A.

Chernyshenko, A. - "New helminths found in Black Sea fish," Trudy Odes. gos. un-ta im. Mechnikova, Vol IV, 1949, p. 79-91, - Bibliog: 17 items

SO: U-5240, 17, Dec. 53, (Letopis 'Zhurnal 'nykh Statey, No. 25, 1949).

MORQUN, N.G., inzh.; CHERNYSHENKO, A.A., inzh.

Hydrodynamic clutch-brakes. Gidr. mash. i gidr. no. l:172-179 '65.
(MIRA 18:12)

1. Khar'kovskiy filial Instituta mekhaniki AN UkrSSR.

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4

CHERNYSHENKO, A.S.

Materials on the feeding of principal commercial fish species
(exclusive of ganoids) in the Dniester basin. Mat. po gidrobiol.
i rybol. lim. severozap. Fricher. no.2:137-150 '53.

(MIRA 12:8)

(Dniester River--Fishes--Food)

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4"

CHERNYSHENKO, A. S.

USSR/Zooparasitology - Parasitic Worms: Helminthes.

P-2

Abs Jour : Referat Zhur Biologii, No 16, 1957, 70155

Author : Chernyshenko, A.S.

Title : Parasitic Fauna in Fish of the Dniester Estuary

Orig Pub : Probl. parasitologii, Kiev, AN USSR, 1956, 288-289

Abstract : Between 1952-1954, there were found 532 fish of 32 different varieties, having 54 kinds of parasites; parasite harboring-73.4%. Ichthyoparasitofauna of the northern part of the estuary had 45 kinds, showing river water characteristics with an insignificant salt-water admixture- Lecithaster confusus and Goezia tricirrata. In the southern part were found 29 kinds of parasites, basically of marine origin. The parasitic fauna of the endemic atavistic fish of the lower Dniestr, Umbria krameri, does not have any specific kinds. It contained the usual pike parasite Azygia lucui which emphasises the genetic closeness of pike and umbria.

Card 1/1

- 5 -

CHERNYSHENKO A.S.

Parasitofauna of endemic relict fishes. Zeol. zhur. 35 no.8:1261
(MLRA 9:10)
Ag '56.

1.Kafedra zoologii pozvonochnykh Odesskogo gosudarstvennogo uni-
versiteta.
(Parasites--Fishes)

USSR/Zooparasitology - Parasitical Worms. General Problems.

G-2

Abs Jour : Ref Zhur - Biol., No 16, 1958, 72252

Author : Chernyshenko, A.S.

Inst : Odessa University.

Title : The Distribution of the Trematode Larvae Among the Fishes
of the Taligul Coastal Salt Lake.

Orig Pub : Nauchn. yezhegodnik. Odessk. un-t, 1956, Odessa, 1957,
261-262.

Abstract : In 12 of 18 fish species dissected in 1955-1956, there were
found larvae of 5 species of trematodes: *Neascus cuticola*,
Diplostomulum spathacum, *D. clavatum*, *Pigidiopsis genata*,
and *Trematoda* sp.

Card 1/1

- 5 -

USSR / Zooparasitology - Helminths.

G-2

Abs Jour : Ref Zhur - Biol., No 18, 1958, No. 81690

Author : Chernyshenko, A. S.

Inst : Odessa Univ.

Title : Fish Trematodes in the Dnestr Estuary

Orig Pub : Pratsi Odesk. un-tu, ser. biol. n., Tr. Odessk. un-ta,
ser. biol. n., 1957, 147, No 8, 195-200

Abstract : Testing of 532 fish of 33 species showed that 73.4% are infected, and the number of identified parasites is 54 (among this number are 28 species of trematodes). The relationship between the distribution of hosts and their parasites and the hydrobiological state of the estuary is clarified. The finding of larvae *Tetracotyle variegata* and *Pygidiopsis genata* requires the shooting of birds -- the definitive hosts (herons and seagulls), and of *Opisthorchis felineus* -- intensification of sanitary-medical measures (sic).

Card 1/1

CHERNYSHENKO, A.S.

Parasites of fishes of the Khadzhibey Liman. Pratsi Od. Un. 152 Ser.
biol. nauk no.12:39-43 '62. (MIRA 17:9)

CHERNYSENKO, E. A.

Cernyšenko, È. A. Investigation of convergence and establishment of an estimate of the error of the method of averaging in a complete normed space. Ukrains. Mat. Z. 6 (1954), 305-313. (Russian)

Let the (not necessarily linear) operator T transform the complete normed metric space X into itself; assume that $\tau = \sup \|Tf_1 - Tf_i\| / \|f_1 - f_i\| < \frac{1}{2}$. The "method of averaging," attributed to Yu. D. Sokolov [same 2, 5 (1953), 159-170; MR 15, 476], is the following iterative method of solving the equation $(*) Tf = f$: Let a linear operator S be given with $\|Sf\| < \|f\|$ (all f). Let $f_1 = Tf_1$, where α_1 is such that $\alpha_1 = S(T\alpha_1)$. For $n=2, 3, \dots$, let $f_n = T(f_{n-1} + \alpha_n)$, where α_n is such that $\alpha_n = S[T(f_{n-1} + \alpha_n)] - Sf_{n-1}$.

The author proves that $\|f - f_n\| \rightarrow 0$, where f is the unique solution of $(*)$, and proves that

$$\|f - f_n\| \leq (2\tau)^{n+1} (1 - \tau)^{-n-1} (1 + \tau)(1 - \tau)^{-1} \|f_1\|.$$

He gives three numerical examples from spaces of functions on $[0, 1]$, with such norms as $\max |f(x)|$ and $\max |f^{(2)}(x)|$. In each application Sf is a function having a constant value, namely the mean value of f .

G. E. Forsythe (Los Angeles, Calif.)

CHERNYSHENKO, E. A.

CHERNYSHENKO, E. A. - "On Certain Methods of Approximate Solution of Operator Equations." Acad Sci Ukrainian SSR, Inst Mathematics, Kiev, 1955.
(Dissertations for the Degree of Candidate in Physicomathematical Sciences)

SO: Knizhnaya letopis', No. 33, 1955, pp 85-87

AUTHOR: CHERNYSHENKO, E.I. (Dnepropetrovsk) 41-1-10/15

TITLE: On an Approximation Method for the Solution of Cauchy's Problem for Ordinary Differential Equations (Ob odnom metode priblizhennogo resheniya zadachi Koshi dlya obyknovennykh differentsial'nykh uravneniy)

PERIODICAL: Ukrainskiy Matematicheskiy Zhurnal, 1958, Vol. 10, Nr 1, pp. 89-100 (USSR)

ABSTRACT: The paper contains a detailed investigation and estimations of errors of the average method proposed in 1955 by Yu.D. Sokolov [Ref.1]. The method is applied to the solution of Cauchy's problem

$$f^{(p)} = v(t, f, f', f'', \dots, f^{(q-1)})$$
$$f(t_0) = a_0, f'(t_0) = a_1, \dots, f^{(p-1)}(t_0) = a_{p-1} \quad , \quad 1 \leq q \leq p$$

Two examples are calculated and the results are compared with those according to the method of Runge-Kutta. 2 Soviet and 1 foreign references are quoted.

SUBMITTED: 17 May 1955

AVAILABLE: Library of Congress
Card 1/1

1. Differential equations . 2. Theory

CHUMACHENKO, I., CHERNYSHENKO, I.

Combines (Agricultural Machinery)

High-production use of the self-propelled combine. MTS 12 no. 7, 1952.

9. Monthly List of Russian Accessions, Library of Congress, September 1952 1A53, Unc1.

S/135/61/000/001/015/018
A006/A001

AUTHOR: Chernyshenko, I.G.

TITLE: On Welding in Water Vapor Atmosphere

PERIODICAL: Svarochnoye proizvodstvo, 1961, No. 1, p. 47

TEXT: Semi-automatic welding in water vapor for the repair of steel castings was introduced into the Yasinovataya Machinebuilding Plant, with the participation of Engineer L.S. Sapiro, who developed the method. To eliminate deficiencies observed, such as porosity in the weld metal, splashing of the built-up metal and poor seam formation, some modifications of the equipment and technology were introduced. The internal diameter of the vapor outlet nozzle was enlarged to 28 mm and shortened in such a manner that it did not protrude from the tip to more than 3 - 4 mm. The jet length was increased to 120 mm, and the electrode operational space was reduced to 25 mm. Welding was performed in a "back angle" position of the electrode to permit a better observation of the arc and a better protection of the pool. Welding conditions were: 220 amps current, 30 - 35 v arc voltage; 180 m/hr electrode wire feed; reverse polarity; Sv-08 wire of 1.6 mm in diameter

Card 1/2

On Welding in Water Vapor Atmosphere

S/135/61/000/001/015/018
A006/A001

was used. Experimental welding was made on МСТ.3 (MSt.3) 10 mm thick steel; the specimens were butt welded in two passes with a 2 mm bead. The tensile strength of the weld joints was 42.3 - 42.5 kg/mm² and their toughness was 7.8 - 12.6 kgm/cm². Experience has shown that the method in its present state can very well be employed for the repair of cast defects.

ASSOCIATION: Yasinovatskiy mashinostroitel'nyy zavod (Yasinovataya Machine-building Plant)

Card 2/2

ABSTRACT: The problem of axisymmetric elastoplastic equilibrium of a shell of rotation with constant meridional curvature is defined and solved. The differential equilibrium equation used is

$$(BT_1)' - BT_2 + ABk_1 Q_1 + ABX = 0,$$

$$-AB(k_1 T_1 + k_2 T_2) + (BQ_1)' + ABZ = 0;$$

$$(BG_1)' - B'G_1 + ABQ_1 = 0,$$

where T_1 , T_2 , G_1 , G_2 , and Q_1 are the meridional and outer normal forces, the deflection moments, and the transverse force, respectively; A and B are coefficients

Card 1/2

L 53813-65

ACCESSION NR: AP5011781

of the first quadratic form; k_1 , and k_2 are major curvatures, and ϕ is the meridional angle (argument). A, B, and k_2 assume different values depending on whether the shell is circular or toroidal. Deformations are defined for two coordinate directions of shift of the shell median surface. Equations of force and moment equilibrium are written in terms of shell geometry, material elasticity, and total and relative displacements. Solution of the equations is afforded by the method of elastic solution and the finite differences method. Additional discussion is devoted to the stress deformed state of a spherical shell near a circular opening. A computer program was written to solve the problem on a BESM-2M machine. A particular set of boundary conditions was used and a discussion of results is presented. Acknowledgement is made of a computer program developed by M. I. Dlugach and A. S. Stepanenko at the Institut mekhaniki, AN UkrSSR, for the solution of a nonsymmetric system of linear equations. Orig. art. has: 6 equations and 4 figures.

ASSOCIATION: Institut mekhaniki AN UkrSSR (Institute of Mechanics, AN UkrSSR);
Kiyevskiy avtomobil'no-dorozhnyy institut (Kiev Automotive Road Institute)

SUBMITTED: 29Jun64

ENCL: 00

SUB CODE:ME, AS

NO REF Sov: 003

OTHEP

Card 2/3

L 01226-67 EWT(d)/EWT(m)/ENP(w)/ENP(v)/ENP(k) IJP(c) KW/EM
ACC'NR: AP6032389 SOURCE CODE: UR/0198/66/002/009/0026/0036

AUTHOR: Chernyshenko, I. S. (Kiev)

38

B

ORG: Institute of Mechanics, Academy of Sciences, UkrSSR (Institut mekhaniki AN UkrSSR)

TITLE: On elastic-plastic equilibrium in shells of revolution under finite deflections

26

SOURCE: Prikladnaya mekhanika, v. 2, no. 9, 1966, 26-36

TOPIC TAGS: ~~elastic plastic deformation, shell of revolution meridional stress,~~
~~spherical shell stress concentration, shell displacement component, elastic~~
~~deformation~~

ABSTRACT: The elastic-plastic state of strain in arbitrary thin shells of revolution is discussed. The axisymmetric deformations of the middle surface of a shell associated with its normal deflections comparable to the shell thickness, are analyzed, using the geometric relationships for the middle surface and the differential equilibrium equations of an element of the shell in terms of forces (meridional, hoop, and shear forces, and bending moments) as initial equations. The expressions for stress components containing the Il'yushin plasticity function are obtained by using the physical relationships based on the theory of small elastic-plastic deformations. From these expressions and initial equations the resolving differential equations in displacements are obtained, from which a system of two sixth-order nonlinear differential equations (for meridional and normal displacement components

Card 1/2

L 01226-57

ACC NR: AP6032389

with variable coefficients is derived. The integration of these equations by successive approximations which leads to the solution of the elastic-plastic problem (considering finite deflections with prescribed approximation) is mentioned. A particular case of determining the stress and strain distributions in a spherical shell under internal pressure which produce finite deflections accompanied by elastic-plastic deformations is discussed. The shell has a circular hole at the top with edges stiffened by a thin elastic ring and is closed by a cover which transmits only the vertical forces to the ring. The finite-difference equations describing the stress and strain distributions in the shell are given, and the results of their numerical solutions (in linear and nonlinear formulations) produced by the BESM-2M electronic computer for the given pressure, the geometric parameters of the shell, and the materials of the shell and ring, are presented in tables and diagrams which show the variations in meridional deformations, stresses, and stress intensities on the inner and outer surfaces of the shell. An analysis of these results indicating the effects of the properties of the stiffening ring and of nonlinear factors on the stress concentration are also given. Orig. art. has: 4 figures, 18 formulas, and 2 tables.

[VK]

SUB CODE: 20 / SUBM DATE: 15Apr66 / ORIG REF: 012 / ATD PRESS: 5096

Card 2/2 egh

CHERNYSHENKO, I. YA.

CHERNYSHENKO, I. YA.

"Investigation of the smoothness of
operation the KD-35 tractor." Min
Higher Education USSR. Leningrad
Agricultural inst. Leningrad, 1956.
(Dissertation for the Degree of Can-
didate in Technical Science)

So: Knizhnaya letopis', No. 15, 1956. Moscow.

CHERNYSHENKO, L. V.

SUSHKO, A.A.; CHERNYSHENKO, L.V.

Silver nitrate method for studying the walls of the lymph and
blood capillaries. Vrach.delo no.4:383-385 Ap '57. (MIRA 10:7)

1. Kafedra normal'noy anatomii (zav. - zasl.deyatel' nauki, prof.
M.S.Spirov) Kyevskogo meditsinskogo instituta.
(CAPILLARIES) (SILVER NITRATE)

USSR / Human and Animal Morphology (Normal and Pathological).
Circulatory System. Blood Vessels.

S

Abs Jour : Ref Zhur - Biologiya, No 1, 1959, No. 2954

Author : Kul'chitskiy, K. I.; Chernyshenko, L. V.; Shkol'nik, B. I.

Inst : Not given

Title : On the Topography of the Artery of the Gallbladder

Orig Pub : Vestn. khirurgii, 1957, No 6, 34-37

Abstract : Upon dissection of vessels following injection with solidifying fluid substances, it was demonstrated that in humans there are 1 or 2 arteries of the gallbladder which originate from various vessels of the hepato-duodenal node. Most frequently the vesical artery (VA) is a single one and originates from the right hepatic artery. In 7 out of 279 cases VA originated from the hepatic artery proper, in 4 cases from the left hepatic, in 3 cases from the common hepatic artery, in 2 cases

Card 1/2

30

USSR / Human and Animal Morphology (Normal and Pathological).
Circulatory System. Blood Vessels.

S

Abs Jour : Ref Zhur - Biologiya, No 1, 1959, No. 2954

from the gastroduodenal, in 1 case from the right gastro-epiploic, and in 2 cases from the superior posterior pancreaticoduodenal artery. The latter was not previously noted in the literature. A double VA was present in 36 cases (12.9%). Both of them may originate from the right hepatic artery or its branches which enter the liver. In other cases the left branch of VA originated from various vessels of the hepatoduodenal node. It is characteristic of VA to have a superficial topography in relation to the bile ducts. A low ligation of VA may produce necrosis of biliary duct walls.
-- N. M. Shestopalova

Card 2/2

CHERNYSHENKO, L.V.

Morphology of the lymph capillaries of the skin and subcutaneous tissue in man. Vrach.delo no.7:727-729 Jl '57. (MIRA 10:8)

1. Kafedra normal'noy anatomii (zav. - zasluzhennyy deyatel' nauki professor M.S.Spirov) Kyivskogo meditsinskogo instituta (LYMPHATICS) (SKIN)

CHERNYSHENKO, L.V.
EXCERPTA MEDICA Soc.10 Vol.11/5 Obstet.&Gynaecol. May 58

814. THE HUMAN INTRAOVARIAL LYMPH VESSELS (Russian text) - Chernyshenko L. V. Dept. of Normal Anat., Kiev; Med. Inst., Kiev - ARKH. ANAT. GISTOL. EMBRIOL. 1957, 34/1 (101-105) Illus. 6

The injection by means of Stefanis apparatus into interior lymph vessels of ovaries, removed from the cadavers of women, children, new-born children and foetuses (64 preparations) showed that those vessels emerge from the cortical layer. The lymph vessels of the latter, which form a network distributed in the connective tissue amongst follicles, are remarkable for the presence of numerous blind processes of different forms. These grow to meet each other and when fusing form dense networks. Lymph vessels of the cortical layer and of the graafian vesicles are devoid of valves, and are situated in the theca interna and theca externa of the follicles. The formation of lymph sets in the corpus luteum is connected with its development. The set of vessels in corpus albicans obliterates. The lymph vessels of the cortical layer gradually increase in diameter to discharge themselves into those of the striae medullares. The lymph vessels of the striae medullares are rosary-like, and possess a great many blind processes, especially at the boundary with the cortical layer. They are remarkable for the presence of the valve sluices which regulate the lymph stream inside the organs. The vessels of the striae medullares pass over to portal vessels, from which the lymph is taken up by draining vessels.

(I, 10)

EXCERPTA MEDICA Sec.9 Vol.12/5 Surgery May 1958
CHERNYSHENKO, L.V.

2925. THE TOPOGRAPHY OF THE A.CYSTICA (Russian text) - Kulchitski
K.I., Chernyshenko L.V. and Shkolnik B.I. - VESTN.KHIR.
1957, 78/6 (34-37) Illus. 2

The investigation was carried out in 202 cadavers of adults and 77 of children. In 243 instances the gallbladder artery was single but of varying origin. Double gallbladder arteries were encountered 36 times. In 17 specimens both gallbladder arteries arose from the right hepatic artery or from its 2 branches supplying the liver. In 15 specimens there were a left-sided a.cystica arising from the right hepatic artery and another single trunk of different origin. The gallbladder artery arising from a.hepatica propria or a.hepatica communis, follows the path of extrahepatic bile ducts and partly supplies them with blood. When arising from the hepatic artery branching from the superior mesenteric artery, the a.cystica follows the right sided free border of the duodenohepatic ligament and terminates at the outer right semi-circle of the gallbladder neck. A right-sided position of the formations of the hepatoduodenal ligament is characteristic of gallbladder arteries arising from the descending branch of a.hepatica communis.

IX 11

CHERNYSHENKO, L.V., kand.med.neuk

Lymphatic capillaries in the serous cover of the abdominal walls
in man. Vrach.delo no.4:401-405 Ap'58 (MIRA 11:6)

1. Kafedra normal'noy anatomi (zav. - zasl. deyatel' nauki,
prof. M.S. Spirov) Kiyevskogo meditsinskogo instituta.
(LYMPHATICS)
(ABDOMEN)

CHERNYSHENKO, L.V., kand.med.nauk

Topography of the intraorganic nerves and nerve ganglia of the
human bladder and of some mammal bladders. Nov.khir.arkh.
no.3:56-59 My-Je '59. (MIRA 12:10)

1. Kafedra normal'noy anatomi (zav. - prof.M.S.Spirov)
Kiyevskogo meditsinskogo instituta.
(BLADDER--INNERVATION)

CHERNYSHENKO, L.V., kand. med. nauk

Lymphatic vessels of the muscles, fascia, and aponeurosis of the anterior wall of the human abdomen. Vrach. delo no.4:403-436 Ap '59
(MIRA 12:7)

l. Kafedra normal'noy anatomi (zav. - zasl.deyateli' nauki, prof.
M.S. Spirov) Kiyevskogo meditsinskogo instituta.
(LYMPHATICS) (ABDOMEN)

SUSHKO, A.A., dotsent; CHERNYSHENKO, L.V., kand.med.nauk

Lymph flow in the human pancreas. Vrach.delo no.6:603-609
Je '60. (MIRA 13:7)

1. Kafedra normal'noy anatomi (zav. - zasl.deyatel' nauki,
prof. M.S. Spirov) Kiyevskogo meditsinskogo instituta.
(LYMPHATICS) (PANCREAS)

CHERNYSHENKO, L.V., kand.med.nauk

Lymphatic vessels of the umbilical region and the umbilical ring of
human fetuses and newborn infants. Vrach.delo no.11:92-96 N '60.

(MIRA 13:11)

1. Kafedra normal'noy anatomii (zav. - zasluzhennyy deyatel' nauki
prof. M.S.Spirov) Kiyevskogo meditsinskogo instituta.

(UMBILICUS)

(FETUS)

(INFANTS (NEWBORN))

(LUMPHATICS)

CHERNYSHENKO, L.V., kand.med.nauk

Lymphatic vessels of the umbilical ring in human fetuses and
newborn infants. Ped., akush. i gin. 22 no.5:25-28 '60.

(MIRA, 15:6)

1. Kafedra normal'noy anatomi (zav. - zasluzhennyy deyatel'
nauki prof. M.S. Spirov) Kyevskogo ordena Trudovogo Krasnogo
Znameni meditsinskogo instituta im. akad. Bogomol'tsa (direktor -
dotsent I.P. Alekseyenko [Aleksieienko, I.P.]).

(LYMPHATICS)

(UMBILICUS)

CHERNYSHENKO, L.V.

Lymphoid follicles, their topography, structure and relation
to the endothelium of lymphatic capillaries. Sbor.nauch.trud.
Kiev.okrugh.voem.gosp. no.4:285-292 '62. (MIRA 16:5)
(LYMPHOID TISSUE) (ENDOTHELIUM) (CAPILLARIES)

CHERNYSHENKO, L.V. (Kiyev-53, ul. Artema, 20, kv.3)

Morphology of the mesothelium of the peritoneum in man and its
relation to the lymphatic capillaries. Arkh. anat., gist. i
embr. 42 no.6:30-35 Je '62. (MIRA 15:6)

l. Kafedra normal'noy anatomii (zav. - prof. M.S. Spirov)
Kiyevskogo meditsinskogo instituta.
(PERITONEUM) (LYMPHATICS) (EPITHELIUM)

BRATUS¹, V.D., prof. red.; ZAYKO, N.N., prof. red.; MAR'KOVSKIY,
N.B., prof., red.; PRIMAK, F.Ya., prof.red.; SPIROV,
M.S., prof.red.; FRUMKIN, Ya.F., prof. red.; CHAYKA
Ye.I., prof. red.; CHERNY SHENKO, L.V., red.; SOLOGUB,
P.Ya., red.

[Physiology and pathology of connective tissues] Fiziologiya i patologiya soedinitel'noi tkani. Kiev, Zdorov'ye,
1964. 251 p.
(MIRA 18:1)

1. Kiev. Medichnyy institut.

CHERNYSHENKO, L.V.

Comparative morphology of the endothelium of lymphatic capillaries of the peritoneum and their relation to the mesothelium. Dop. AN URSR no. 9:1234-1237 '64.

(MIRA 17:11)

1. Kiyevskiy meditsinskiy institut. Predstavлено академиком
AN UkrSSR. V.G. Kas'yanenko [Kas'yanenko, V.H.].

SHAPIRO, D.S.; CHERNYSHENKO, N.N.

Fauna and ecology of leaf beetles (Coleoptera, Chrysomelidae:
Halticinae, Cassidinae, Hispinae) of the northeastern forest
steppe and Polesye of the Ukraine. Ent. oboz. 42 no.3:576-
581 '63. (MIRA 17:1)

1. Kafedra entomologii Khar'kovskogo gosudarstvennogo
universiteta, Khar'kov.

FIDEL'EV, A.S., professor, doktor tekhnicheskikh nauk; CHERNYSHENKO, O.A.,
inzhener.

Determining open pit limits in a combined mining system. Ugol'
31 no.1:16-18 Ja '56. (MIRA 9:4)

1. Institut gornogo dela imeni M.M.Fedoreva Akademii nauk USSR.
(Strip mining)

CHERNYSHENKO, O.A., kand. ekonom. nauk

World production of manganese ore. Met. i gornorud. prom.
no.4:95 Jl-Ag '63. (MIRA 16:11)

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4

CHERNYSHENKO, O.A., kand. ekonom. nauk; ROMAIEJKO, I.I.; MAKSIMCHUK, A.D.

Utilization of capital assets in the mining industry of the
Ukrainian S.S.R. Met. i gornorud. prom. no.6:49-50 N-D '64.
(MTR 18:3)

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4"

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4

CHERNYSHENKO, V. M.

CHERNYSHENKO, V. M. --"Spaces that Can Be Reflected on Euclidean Spaces with the Geodesics Being Preserved." *(Dissertations for Degrees in Science and Engineering Defended at USSR Higher Educational Institutions) Min of Higher Education USSR, Moscow State U imeni M. V. Lomonosov, Dnepropetrovsk, 1955

SO: Knizhnaya Letopis', No. 25, 18 Jun 55

* For the Degree of Doctor of Physicomathematical Sciences

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4"

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4

respectivement. Une paroi holomorphe est dite „métriquement semi-tchébychevienne“.

1.5.2.7

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4"

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4"

CHERNYSHENKO, V.M. (Dnepropetrovsk)

One iteration method for solving algebraic equations. Mat. pros.
no.5:206-208 '60. (MIRA 13:12)
(Equations, Theory of)

CHERNYSHENKO, V.M.

PHASE I BOOK EXPLOITATION

SOV/5726

Moscow. Universitet.

Trudy seminara po vektornomu i tensornomu analizu s ikh prilozheniyami
k geometrii, mehanike i fizike. vyp. 11. (Transactions of the
Seminar on Vector and Tensor Analysis With Their Application in
Geometry, Mechanics, and Physics. no. 11) [Moscow] 1961. 314 p.
2,500 copies printed.

Sponsoring Agency: Moskovskiy gosudarstvennyy universitet imeni
M. V. Lomonosova.

Ed. (Title page): P. K. Rashevskiy, Professor; Ed.: V. A.
Gukovskaya; Tech. Ed.: K. S. Chistyakova.

PURPOSE: This book is intended for theoretical physicists, mathe-
maticians, and engineers.

COVERAGE: The book contains reports presented at the Seminar on
Vector and Tensor Analysis (Moscow, 1961), includes an annotated

Card 1/5

Transactions of the Seminar (Cont.)

SOV/5726

bibliography of some reports presented at Seminar meetings over the period 1 July 1954 through 31 December 1957, and reviews the life and works of Yakov Semenovich Dubnov (1887-1957), senior member and cofounder (with V. F. Kagan and others) of the Seminar. Professor Dubnov's contributions to mathematics are reviewed in some detail and include his teaching of analytical and differential geometry with the application of vector analysis and works on problems in the algebra of affinors. Dubnov also wrote Dubnovy vektornogo ischisleniya (Principles of Vector Calculus), studied the general theory of nets on surfaces, and worked on studies of different types of nets and invariant characteristics of nets on surfaces, the central projective and affine theory of curves and surfaces, and related subjects. A chronological bibliography of his publications is included. The biographical sketch of Professor Dubnov was written by V. V. Wagner and A. N. Lopshits. No personalities are mentioned. References accompany individual articles.

Card 2/5

10

Transactions of the Seminar (Cont.)	307/5726
TABLE OF CONTENTS:	
Makov Semenovich Dubnev [Deceased]	3
Brief Information on the Activity of the Seminar for the Period From 1 July 1954 Through 31 Dec 1957	19
Korevich, G. B. Semicharacteristic and Characteristic Subalge- bras of a Standard Hull Algebra	25
Selodovnikov, A. S. Spaces With General Geodesics	43
Kruzhkovich, O. I. One Class of Riemannian Spaces	103
Lopshits, A. M. Solution of a Special System of Differential Equations With Constant Coefficients	129
Shulikovskiy, V. T. Differential-Topological Characteristics of a Family of Nets With Equal Chebyshev Vectors and a General Apolar Net	141
CONT 3/5	

10

Transmissions of the Seminar (Cont.)	SOV/5726
Ryboldin, B. F. Theory of Curves in $(n - 1)$ -Dimensional Projective Spaces	153
Chernodubov, B. M. Field Theory of Local Improper Hyperbands in X^n	165
Zhotilov, A. I. Theory of Field of Local Surfaces Tangent in a Compound Manifold of the First Order $K_0(X_n)$	189
Kabanov, B. P. Geometrical Theory of Caratheodory Transformation in a Topographic Problem	219
Abramov, B. T. Spinor Representations of Motions of Quasi-Euclidean spaces	241
<u>Chernyshenko, V. M.</u> Spaces With a Special Complex of Geodesic Lines	253

Card 4/5

42

Transactions of the Seminar (Cont.)	SOV/5726
Fedishchenko, S. I., and <u>V. M. Chernyshenko</u> . One Generalization of Spaces of Constant Curvature	259
Kropina, V. K. Projective Two-Dimensional Finsler Spaces With a Special Metric	277
Solodovnikov, A. S. Models of Elliptical Spaces	293
Neyfel'd, E. G. Problem of the Centroequiaffine Geometry of Plane Curves of the Third and Fourth Orders	309
Katipov, A. E. - A. The Theory of Surfaces in Space With a Decomposing Absolute	311
AVAILABLE: Library of Congress	JAN/rsm/ec
Card 5/5	11-20-61

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4

CHERNYSHENKO, V.M.

Generalization of a theorem of I.S. Dubnov. Ukr.mat.zhur. 13 no.4:111-
114 '61. (MIRA 15:7)
(Conformal mapping) (Surfaces, Representation of)

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4"

16.6500

S/044/62/000/006/090/127
B166/B112AUTHOR: Chernyshenko, V. M.

TITLE: A general method of constructing iterative processes

PERIODICAL: Referativnyy zhurnal. Matematika; no. 6, 1962, 37-38,
abstract 6V177 (Nauchn. zap. Dnepropetr. un-t, v. 55, 1961,
139-143)TEXT: An equation $f(x) = 0$ with a sufficiently smooth function on the left-hand side is examined. The question posed is to find a function $\omega[x, f(x), f'(x), \dots, f^{(p-1)}(x)] = \psi(x)$
such that the iterative process $x_{i+1} = \psi(x_i)$ has a convergence rate of the order of p . The necessary and sufficient conditions are found: The function ω must satisfy the conditions

$$\omega(x, 0, f', \dots, f^{(p-1)}) = x,$$
$$\left. \frac{\partial^i \omega}{\partial f^i} \right|_{f=0} = i! \mu_i, \quad (i = 1, \dots, p - 1),$$

Card 1/2

A general method of constructing ...

S/044/62/000/006/090/127
B166/B112

where $\mu_1 = -1/f'$, $\mu_{i+1} = -\frac{1}{(i+1)f'} \frac{d\mu_i}{dx}$.

The conditions deduced can be interpreted as the initial conditions of a Cauchy problem for a certain equation

$$\frac{\partial^p \omega}{\partial f^p} = F(x, f, \dots, f^{(p-1)}, \omega, \frac{\partial \omega}{\partial x}, \dots, \frac{\partial^p \omega}{\partial f^{(p-1)}})^p.$$

By selecting different functions F one can obtain various iterative processes. In particular, the well-known Schröder formulas are obtained when $F \equiv 0$. Analogous conditions are also obtained for a system of two equations with two unknowns. It is stated that a similar result is also obtained for any number of equations. [Abstracter's note: Complete translation.]

Card 2/2

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4

CHERNYSHENKO, V.P.

TEODORI, M.I., kandidat meditsinskikh nauk (Kiyev); CHERNYSHENKO, V.P.
(Kiyev).

Agramulocytic reactions to the use of para-aminosalicylic acid.
Sov.med.'17 no.12:6-9 D '53. (MLRA 6:12)
(Agramulocytosis) (Para-aminosalicylic acid)

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620017-4"

CHERNYSHEV, A.

Polishing aluminum in an alkaline electrolyte. Prom.koop. 14
no.1:18 Ja '60. (MIRA 13:5)

1. Starshiy inzhener tekhnicheskogo upravleniya Rospromsoveta.
(Aluminum--Electrometallurgy)

CHERNYSHEV, A.A.

SAMCHENKO, V., inzh.; CHERNYSHEV, A., inzh.; NIKITIN, N.

New use for the PK-2M cutter loader. Mast. ugl. 7 no.2:13-15 F '58.
(MIRA 11:3)

1. Instruktor peredovykh metodov truda normativno-issledovatel'skoy
stantsii No.14 (for Nikitin).
(Coal mining machinery)

CHERNYSHEV, A.A.

Tractors

A.I. Gonchar's tractor inclinometer. Les. i step' 4, no. 9, 1952.

9. Monthly List of Russian Accessions, Library of Congress, DECEMBER 1952~~1953~~, Uncl.

CHERNYSHOV A.A.

ANDON'YEV, V.L.; BAUM, V.A.; BAUMGARTEN, N.K.; BEREZIN, V.D.; BIRYUKOV, I.K.;
BIRYUKOV, S.M.; BLOKHIN, S.I.; BOROVYI, G.A.; BULEV, M.Z.; BURAKOV,
N.A.; VERTSAYZER, B.A.; VOVK, G.M.; VORMAN, B.A.; VOSHCHININ, A.P.;
GALAKTIONOV, V.D., kand. tekhn. nauk; GENKIN, Ye.M.; GIL'DENBLAT,
Ya.D., kand. tekhn. nauk; GINZBURG, M.M.; GLIEBOV, P.S.; GODES, E.G.;
GORBACHEV, V.N.; GRZHIB, B.V.; GREKULOV, L.F., kand. s.-kh. nauk;
GRODZHENSKAYA, I.Ya.; DANILOV, A.G.; DMITRIYEV, I.G.; DMITRIYENKO,
Yu.D.; DOBROKHOTOV, D.D.; DUBININ, L.G.; DUNDUKOV, M.D.; ZHOLIK,
A.P.; ZENKEVICH, D.K.; ZIMAREV, Ye.V.; ZIMASKOV, S.V.; ZUBRIK, K.M.;
KARANOV, I.F.; KNYAZEV, S.N.; KOLEGAYEV, N.M.; KOMAREVSKIY, V.T.;
KOSENKO, V.P.; KORENISTOV, D.V.; KOSTROV, I.N.; KOTLYARSKIY, D.M.;
KRIVSKIY, M.N.; KUZNETSOV, A.Ya.; LAGAR'KOV, N.I.; LGALOV, V.G.;
LIKHACHEV, V.P.; LOGUNOV, P.I.; MATSKLEVICH, K.F.; MEL'NICHENKO,
K.I.; MENDELEVICH, I.R.; MIKHAYLOV, A.V., kand. tekhn. nauk;
MUSIYEEVA, R.N.; NATANSON, A.V.; NIKITIN, M.V.; OVES, I.S.;
OGUL'NIK, G.R.; OSIPOV, A.D.; OSMER, N.A.; PETROV, V.I.; PERYSHKIN,
G.A., prof.; P'YANKOVA, Ye.V.; RAPOPORT, Ya.D.; REMZOV, N.P.;
ROZANOV, M.P., kand. biol. nauk; ROCHEGOV, A.G.; RUBINCHIK, A.M.;
RYBACHEVSKIY, V.S.; SADCHIKOV, A.V.; SEMENTSOV, V.A.; SIDENKO, P.M.;
SINYAVSKAYA, V.T.; SITAROVA, M.N.; SOSNOVICKOV, K.S.; STAVITSKIY,
Ye.A.; STOLYAROV, B.P. [deceased]; SUDZILOVSKIY, A.O.; SYRTSOVA,
Ye.D., kand. tekhn. nauk; FILIPPSKIY, V.P.; KHALTURIN, A.D.;
TSISHEVSKIY, P.M.; CHERKASOV, M.I.; *CHERNYSHOV, A.A.*; CHUSOVITIN,
N.A.; SHESTOPAL, A.O.; SHEKHTER, P.A.; SHISHKO, G.A.; SHCHERBINA,
I.N.; ENGEL', F.F.; YAKOBSON, A.G.; YAKUBOV, P.A., ARKHANGEL'SKIY,

(Continued on next card)

ANDON'YEV, V.L.... (continued) Card 2.

Ye.A., retsentent, red.; AKHUTIN, A.N., retsentent, red.; BALASHOV,
Yu.S., retsentent, red.; BARABANOV, V.A., retsentent, red.; BATUNER,
P.D., retsentent, red.; BORODIN, P.V., kand. tekhn. nauk, retsentent,
red.; VALUTSKIY, I.I., kand. tekhn. nauk, retsentent, red.;
GRIGOR'YEV, V.M., kand. tekhn. nauk, retsentent, red.; GUBIN, M.F.,
retsentent, red.; GUDAYEV, I.N., retsentent, red.; YERMOLOV, A.I.,
kand. tekhn. nauk, retsentent, red.; KARAULOV, B.F., retsentent,
red.; KRITSKIY, S.N., doktor tekhn. nauk, retsentent, red.; LIKIN,
V.V., retsentent, red.; LUKIN, V.V., retsentent, red.; LUSKIN, Z.D.,
retsentent, red.; MATRIROSOV, A.Kh., retsentent, red.; MENDELEYEV,
D.M., retsentent, red.; MENKEL', M.F., doktor tekhn. nauk, retsentent,
red.; OBREZKOV, S.S., retsentent, red.; PETRASHEN', P.N., retsentent,
red.; POLYAKOV, L.M., retsentent, red.; RUMYANTSEV, A.M., retsentent,
red.; RYABCHIKOV, Ye.I., retsentent, red.; STASENKOVA, N.G., retsen-
tent, red.; TAKANAYEV, P.F., retsentent, red.; TARANOVSKIY, S.V.,
prof., doktor tekhn. nauk, retsentent, red.; TIZDEL', R.R., retsen-
tent, red.; FEDOROV, Ye.M., retsentent, red.; SHLEVYAKOV, M.N.,
retsentent, red.; SHMAKOV, M.I., retsentent, red.; ZHUK, S.Ya.
[deceased], akademik, glavnnyy red.; HUSSO, G.A., kand. tekhn. nauk,
red.; FILIMONOV, N.A., red.; VOLKOV, L.N., red.; GRISHIN, M.M., red.;
ZHURIN, V.D., prof., doktor tekhn. nauk, red.; KOSTROV, I.N., red.;
LIKACHEV, V.P., red.; MEDVEDEV, V.M., kand. tekhn. nauk, red.;
MIKHAYLOV, A.V., kand. tekhn. nauk, red.; PETROV, G.D., red.; RAZIN,
N.V., red.; SOBOLEV, V.P., red.; FERINGER, B.P., red.; FREYGOFER,

(Continued on next card)

ANDON'YEV, V.L.... (continued) Card 3.
Ye.F., red.; TSYPLAKOV, V.D. [deceased], red.; KORABLINOV, P.N..
tekhn. red.; GUNKIN, Io.M., tekhn. red.; KACHEKOVSKIY, N.V., tekhn.
red.

[Volga-Don; technical account of the construction of the V.I. Lenin
Volga-Don Navigation Canal, the Tsimlyansk Hydroelectric Center,
and irrigation systems] Volgo-Don; tekhnicheskii otchet o stroitel'-
stve Volgo-Donskogo sudokhodnogo kanala imeni V.I. Lenina, TSIM-
LYANSKOGO gidrokanala i orositel'nykh sotsuzhenii, 1949-1952; v piati
tomakh. Moskva, Gosp. energ. izd-vo. Vol.1. [General structural
descriptions] Obshchee opisanie sotsuzhenii. Glav. red. S.IA. Zhuk.
Red. toma M.M. Grishin. 1957. 319 p. Vol.2. [Organization of con-
struction. Specialized operations in hydraulic engineering] Orga-
nizatsiya stroitel'stva. Spetsial'nye gidrotekhnicheskie raboty.

(Continued on next card)

ANDON'YEV, V.I.... (continued) Card 4.

Glav. red. S.IA. Zhuk. Red. toma I.N. Kostrov. 1958. 319 p.

(MIRA 11:9)

1. Russia (1923- U.S.S.R.) Ministerstvo elektrostantsii. Byuro
tekhnicheskogo otcheta o stroitel'stve Volgo-Dona. 2. Chlen-kor-
respondent Akademii nauk SSSR (for Akhutin). 3. Deystvitel'nyy
chlen Akademii stroitel'stva i arkhitektury SSSR (for Grishin,
Razin).

(Volga Don Canal--Hydraulic engineering)

CHERNYSHEV, A.A.

Velocity of the runoff of snow water in the forest and in the
field. Meteor. i gidrol. no.11:49-51 N '63. (MIRA 16:11)

1. Ukrainskiy nauchno-issledovatel'skiy institut lesnogo
khozyaystva i agrolesomelioratsii.

CHERNYSHEV, A.D., inzhener.

Damming the Terek River at the site of the Kargalinskaya hydraulic development. Gidr. stroi. 26 ne.3:29-33 Mr '57. (MIRA 10:4)
(Terek river--Dams)

CHERNYSHEV, A.F., inzh. (Kalinin)

Synthetic materials for passenger cars. Zhel.dor.transp.
46 no.12:73-75 D '64.

(MIRA 19:1)

1. Glavnnyy konstruktor Kalininskogo vagonostroitel'nogo
zavoda.

CHERNYSHEV, A.I.

BIRYUKOV, V.A., kandidat tekhnicheskikh nauk; CHERNYSHEV, A.I., inzhener.

Heat treatment of cutting tools with high frequency current. Der.1
lesokhim. prom. 3 no.2:3-6 P '54. (MLRA 7:1)

1. TSMIL tresta Sevzaples.

(Cutting tools) (Metals--Heat treatment)

CHERNYSHEV, A.I., inzh.

Saw filer's template gauge. Der. prom. 8 no.10:25 0 '59.
(MIRA 12:12)

1. Spetsial'noye konstruktorskoye byuro Upravleniya lesnoy i mebel'noy
promyshlennosti Lensovmarkhoza.
(Saw filing)

KHORIN, Vladimir Nikitovich, doktor tekhn. nauk; FATEYEV, Sergey
Nikolayevich, inzh.; CHERNYSHOV, Andrey Ivanovich, inzh.

[High-torque hydraulic motors in mining machinery construction] Vysokotormentnye gidrodvigateli v gornom mashinostroenii. Moskva, Nedra, 1964. 116 p. (MLA 17:8)

CHERNYSHEV, A., inzh.

Project of the X-20 "Dyna-Soar" rocket plane. Av.i kosm. 46
no. 9:91-94 S '63. (MIRA 16:10)